Official Journal of the American Academy of Pain Medicine, the Faculty of Pain Medicine of the Australian and New Zealand College of Anaesthetists and of the Spine Intervention Society


DEAN’S MESSAGE
1599 Edward A. Shipton, Fanzca, Ffpmanzca, MD
“Making Progress Towards Our Strategic Goals”

GENERAL SECTION

Original Research Article
1602 Emeline das Neves de Araújo Lima, PhD, Natália Guimarães Barbosa, MSc, Ana Celly Souza dos Santos, MSc, Telma Maria Araújo Mouro Lemos, PhD, Cleber Machado de Souza, PhD, Paula Cristina Trevilatto, PhD, Ericka Janine Dantas da Silveira, PhD, and Ana Miryam Costa de Medeiros, PhD
Comparative Analysis of Psychological, Hormonal, and Genetic Factors Between Burning Mouth Syndrome and Secondary Oral Burning
This study evaluated psychological and hormonal status, as well as a possible association of genetic factors with the development and/or maintenance of symptoms in burning mouth syndrome, in order to obtain a better understanding of the factors associated with this condition and consequent adaptation of diagnostic/therapeutic processes.

SPINE SECTION

Original Research Articles
1612 Sooyoung Cho, MD and Hahck Soo Park, MD, PhD
Percutaneous Epidural Adhesiolysis with Epidural Steroid Injection: A Non-Inferiority Test of Non-particulate Steroids Versus Particulate Steroids
Particulate steroid use is being avoided due to concerns about complications such as an embolic risk. We conducted a retrospective study to see if non-particulate steroids can replace particulate steroids in percutaneous epidural adhesiolysis (PEA). By Non-inferiority analysis, we showed dexamethasone has non-inferior efficacy compared with triamcinolone acetonide in a 6 months follow-up. Therefore, we can suggest that dexamethasone might be a good alternative to triamcinolone acetonide for PEA.

1620 Eung Don Kim, MD, Mi Sun Roh, MD, Jun Jae Park, MD, and Daehyun Jo, MD, PhD
Comparison of the Ventral Epidural Spreading in Modified Interlaminar Approach and Transforaminal Approach: A Randomized, Double-Blind Study
To overcome limited accessibility to the ventral epidural space by the conventional interlaminar approach and transforaminal approach, we have modified the conventional approach method. Our new method (Modified Interlaminar approach; MIL approach) showed a superior accessibility to the ventral epidural space in cases of foraminal stenosis. Our MIL approach can be considered an alternative method for bringing injectate to the ventral epidural space in cases of foraminal stenosis.

1628 David S. Levi, MD Scott Horn, DO, and Alexandra Collado, BS
Reliability and Accuracy of MRI Laminar Angle Measurements to Determine Intra-Procedural Contralateral Oblique View Angle for Cervical or Thoracic Interlaminar Epidural Steroid Injections
The authors routinely determined the true fluoroscopic contra-lateral oblique (CLO) angle after epidural access was confirmed, for use during any potential future injections. These angle measurements were compared blindly to MRI axial laminar angle measurements. Accuracy was 57% comparing MRI laminar angle measurements to within 5 degrees of the true fluoroscopic CLO angle as determined during the injection. MRI laminar angle measurements do not appear to be accurate in determining the appropriate fluoroscopic CLO angle.
Safety of Lumbar Spine Radiofrequency Procedures in Patients Who Have Posterior Spinal Hardware

This prospective study of patients with symptomatic facet joint pain adjacent to the level of posterior lumbar spine fusion hardware demonstrated that medial branch nerve radiofrequency lesioning adjacent to posterior fusion hardware risks the possibility of thermal energy being transferred to the hardware. This may result in heating of the hardware, which may increase the risk of injury to the patient undergoing the procedure.

Deconstructing Chronic Low Back Pain in the Older Adult — Step by Step Evidence and Expert-Based Recommendations for Evaluation and Treatment. Part X: Sacroiliac Joint Syndrome

A multidisciplinary expert panel convened to create an algorithm and supportive materials to help guide primary care providers in planning treatment for older adults with sacroiliac joint syndrome (SIJ), an important and often overlooked contributor to chronic low back pain (CLBP).

Effects of a Peer-Led Pain Management Program for Nursing Home Residents with Chronic Pain: A Pilot Study

A 12-week group-based pain management program (PAP) was offered to nursing home residents. Two 1-hour sessions per week of PAP were led by research team and trained peers for experimental group; while control group received one 1-hour session of PAP each week from the research team only. Findings show that the peer-led PAP was feasible and has potential at relieving chronic pain and enhancing the physical and psychological health of nursing home residents.

Development and Patient Satisfaction of a New Telemedicine Service for Pain Management at Massachusetts General Hospital to the Island of Martha’s Vineyard

Patients in remote areas lack access to pain management services. In order to provide pain management care to patients remote from our center, we created a telemedicine pain clinic (telepain) at Massachusetts General Hospital (MGH) in Boston, MA to extend services to the island of Martha’s Vineyard. 49 consecutive patients answered a 14-question, 5 point balanced Likert-scale survey. The results suggest an overall positive reception of telepain by patients, yet highlight the challenge of building a patient-physician relationship remotely.

Global and Situational Relationship Satisfaction Moderate the Effect of Threat on Pain in Couples

This study examines how threat and relationship factors interact to affect acute pain in an experimental paradigm with undergraduate romantic couples. Findings include experimental evidence that suggests that both global and situational romantic relationship satisfaction moderate the effect of threatening information on one’s pain experience. These findings indicate that threatening information about pain, global relationship satisfaction, and interactions with significant others may be targets for future clinical interventions.
OPIOIDS, SUBSTANCE ABUSE & ADDICTIONS SECTION

Original Research Articles

1676 Julie L. Cunningham, PharmD, Michele M. Evans, APRN, CNS, Susan M. King, RN, Jessica M. Gehin, RN, and Larissa L. Loukianova, MD, PhD

Opioid Tapering in Fibromyalgia Patients: Experience from an Interdisciplinary Pain Rehabilitation Program

This study describes opioid tapering for patients with fibromyalgia through the analysis of medication tapers from an outpatient interdisciplinary pain rehabilitation program, including taper rates, peak of withdrawal scores, and time-to-peak withdrawal scores based on total opioid dose and duration of opioid use. Outcome measures of pain levels, depression, pain catastrophizing, and functional limitations in the FM patients on opioids were compared with those patients who were not taking opioids and at program completion.

1686 Jan Chambers, Rae M. Gleason, Kenneth L. Kirsh, PhD, Robert Twillman, PhD, Lynn Webster, MD, Jon Berner, MD, PhD, Jeff Fudin, PharmD, FCCP, FASHP, and Steven D. Passik, PhD

An Online Survey of Patients’ Experiences Since the Rescheduling of Hydrocodone: The First 100 Days

An internet survey was conducted to reach out to patients who were impacted by the rescheduling of hydrocodone during the first 100 days of the change in legislation. While limited due to the nature of the survey and patient advocacy group largely having fibromyalgia as a diagnosis, there was nonetheless a broad impact on patient care following the legislative change.

METHODOLOGY, MECHANISMS & TRANSLATIONAL RESEARCH SECTION

Review Article

1694 Zakir Uddin, BScPT, MSc, PhD, and Joy C. MacDermid, BSc, BScPT, MSc, PhD

Quantitative Sensory Testing in Chronic Musculoskeletal Pain

The paper highlights measurement properties of quantitative sensory testing (QST) and its research and clinical benefits. QST in chronic musculoskeletal pain disorders is reviewed. QST has been shown to be related to pain or neural sensitivity in musculoskeletal pain and may play a role to monitor the disease prognosis and outcome evaluation in therapy intervention. Only continued research within homogenous parameters of QST will define this role.

NEUROMODULATION & INTERVENTION SECTION

Original Research Article

1704 Zhigang Guo, MD, Baishan Wu, MD, Chao Du, MD, Min Cheng, MD, and Yu Tian, MD

Stereotactic Approach Combined with 3D CT Reconstruction for Difficult-to-Access Foramen Ovale on Radiofrequency Thermocoagulation of the Gasserian Ganglion for Trigeminal Neuralgia

Authors describe a technique that includes a stereotactic approach in the preoperative plan in cases where the foramen ovale is difficult to access for radiofrequency thermocoagulation of the Gasserian ganglion. 24 patients with difficult-to-access foramen ovaless, and 21 patients (87.5%) required a single satisfactory puncture. This technique can improve the accuracy, safety, and efficiency of percutaneous radiofrequency thermocoagulation in patients with TN for whom the foramen ovale is difficult to access.

NEUROPATHIC PAIN SECTION

Brief Research Report

1717 María-Luz Cuadrado, MD, PhD, Héctor García-Moreno, MD, José-Antonio Arias, MD, PhD and Juan A. Pareja, MD, PhD

Botulinum Neurotoxin Type-A for the Treatment of Atypical Odontalgia

Current treatment of atypical odontalgia (AO) is often unsatisfactory. Four patients with refractory AO obtained significant relief with local injections of botulinum neurotoxin type-A (BoNTA). Injection sites were evenly distributed over the painful area, and no adverse events were reported from any of the interventions. BoNTA injections may be safe an effective option for the treatment of AO.

MUSCULOSKELETAL SECTION

Original Research Article

1722 Fariba Eslamian, MD, Seyed Kazem Shakouri, MD, Fatemeh Jahanjoo, MS, Mehrzad Hajialiloo, MD, and Faraz Notghi, MD

Extra Corporeal Shock Wave Therapy Versus Local Corticosteroid Injection in the Treatment of Chronic Plantar Fasciitis, a Single-Blinded Randomized Clinical Trial

Plantar fasciitis is the most common cause of heel pain and it is self-limiting condition, but can be painful and disabling. In this study we evaluated efficacy of shockwave therapy (ESWT) vs corticosteroid injection on pain intensity, functional disability, and satisfaction in the treatment of 40 patients with chronic plantar fasciitis. Both groups showed improvement of all parameters significantly after 2 months treatment. Although inter-group differences were not significant, the FFI was improved more with ESWT and patients were more satisfied with ESWT, thus shockwave therapy seems a safe alternative for management of chronic plantar fasciitis.

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ACUTE & PERIOPERATIVE PAIN SECTION

Original Research Article

1732 Seshadri C. Mudumbai, MD, MS, Elizabeth M. Oliva, PhD, Eleanor T. Lewis, PhD, Jodie Trafton, PhD, Daniel Posner, MA, Edward R. Mariano, MD, MAS, Randall S. Stafford, MD, PhD, Todd Wagner, PhD, and J. David Clark, MD, PhD

Time-to-Cessation of Postoperative Opioids: A Population-Level Analysis of the Veterans Affairs Healthcare System

Little information exists at a population level to identify predictors for time-to-cessation of postoperative opioid use. This study aims to determine 1) the epidemiology of perioperative opioid use; and 2) the association between patterns of preoperative opioid use and time-to-cessation of postoperative opioids. In a national, population-level study of Veterans Healthcare Administration surgical patients, greater preoperative levels of opioid use were associated with progressively longer time-to-cession postoperatively.

HEADACHE & FACIAL PAIN SECTION

Brief Research Report

1744 M. Ruiz, MD, J. Porta-Etessam, MD, S. Garcia-Ptacek, MD, C. de la Cruz, MD, M.L. Cuadrado, MD, PhD, and A.L. Guerrero, MD, PhD

Auriculotemporal Neuralgia: Eight New Cases report

Auriculotemporal neuralgia (ATN) is an infrequent syndrome consisting in strictly unilateral pain in the temporal region. We analyzed clinical characteristics and treatment response in a series of 8 consecutive patients from two Headache Clinics. Mean age at onset was 52 years, pain was strictly unilateral and triggered by pressing the preauricular area. Four patients presented with moderate background pain and six with burning pain exacerbations. Two patients improve spontaneously, three after anaesthetic blockade and three with gabapentin.

REHABILITATION SECTION

Original Research Article

1749 César Ferañández-de-las-Peñas, PT, PhD, DMSc, Juan J. Fernández-Munoz, PhD, Esperanza Navarro-Pardo, PhD, Ricardo F. da-Silva-Pocinho, PhD, Silvia Ambite-Quesada, PT, PhD, and Juan A. Pareja, MD, PhD

Identification of Subgroups of Women with Carpal Tunnel Syndrome with Central Sensitization

This study presents a method of clinical identification of subgroups of patients with carpal tunnel syndrome (CTS) exhibiting higher widespread pressure hypersensitivity and thermal hyperalgesia. Patients with CTS exhibiting higher sensitization may need different therapeutic options.

INTEGRATIVE MEDICINE SECTION

Review Article

1757 Courtney Boyd, MA, Cindy Crawford, BA, Charmagne F. Paat, BS, Ashley Price, BS, Lea Xenakis, MPA, Weimin Zhang, PhD, and the Evidence for Massage Therapy (EMT) Working Group

The Impact of Massage Therapy on Function in Pain Populations — A Systematic Review and Meta-Analysis of Randomized Controlled Trials: Part III, Surgical Pain Populations

A systematic review and meta-analysis was conducted, using Samueli Institute’s rapid evidence assessment (REAL(c)) methodology, to rigorously assess the quality of massage therapy and the evidence for its efficacy in treating individuals either recovering from or about to undergo a surgical-operative procedure and experiencing some sort of pain. This review also addresses massage therapy safety, research challenges, how to address identified research gaps, and necessary next steps for implementing massage therapy as a viable pain management option for surgical pain populations.

LETTERS TO THE EDITOR

1773 Kevin F. Maskell, MD, Michael L. Bailey, DO, and S. Rutherford Rose, PharmD

Self Medication with Methoxetamine as an Analgesic Resulting in Significant Toxicity

1775 Lakshmi Vas, MD, Renuka Pai, Diploma in Anaesthesia, Kirti S. Pawar, Diploma in Anaesthesia, and Manorama Pattnaik, MD

“Piriformis Syndrome”: Is It Only Piriformis?

1779 Laxmaiah Manchikanti, MD, Alan David Kaye, MD, PhD, and Joshua A. Hirsch, MD

Systematic Review of Cervical Medial Branch Thermal Radiofrequency Neurotomy is not Based on Peer Review Published Methodology

1781 Andrew Engel, George Rappard, Wade King, and David Kennedy

Differing Philosophical Approaches to Treating Patients